What is claimed is:

1. An accelerometer comprising:

a substrate;

a mass having an outer periphery, a cavity defining an inner periphery, and a plurality of elongated fingers along a portion of the inner periphery;

mass support structures, positioned within the inner periphery and affixed to the substrate by at least one anchor positioned proximate to the mass' center of mass, for supporting the mass above the substrate and allowing movement of the mass relative to the substrate; and

a plurality of elongated sensing fingers for sensing movement of the mass fingers relative to the sensing fingers, the sensing fingers positioned substantially alongside the mass fingers within the inner periphery and affixed to the substrate proximate to the at least one anchor such that mechanical stresses cause the mass fingers and the sensing fingers to move in substantially equal ways.

2. An accelerometer according to claim 1, wherein the mass support structures comprise:

a plurality of suspension springs; and

a plurality of support arms, wherein the suspension springs are disposed between the mass and the support arms, and wherein the support arms are affixed to the substrate.

3. An accelerometer according to claim 1, wherein the mass support structures are affixed to the substrate using a single anchor.

4. An accelerometer according to claim 3, wherein the single anchor is a substantially square anchor.

5. An accelerometer according to claim 1, wherein the mass support structures are affixed to the substrate using multiple anchors positioned substantially symmetrical about the mass' center of mass.

6. An accelerometer according to claim 2, wherein the support arms are configured substantially in one of:

a cruciform configuration; and

an "H" configuration.

7. An accelerometer according to claim 1, wherein at least one elongated sensing finger is affixed to the substrate using a single elongated anchor in order to reduce rotation of the elongated sensing finger about the anchor.

8. An accelerometer according to claim 1, wherein at least one elongated sensing finger is affixed to the substrate using multiple anchors in order to reduce rotation of the elongated sensing finger about the anchors.

9. An accelerometer according to claim 1, wherein the mass support structures support the mass within the mass' inner periphery toward the mass' outer periphery.

10. A method for reducing offset in an accelerometer, the method comprising:

forming a mass having an outer periphery, a cavity defining an inner periphery, and a plurality of elongated finger structures along a portion of the inner periphery;

forming a plurality of mass support structures within the inner periphery of the mass;

forming a plurality of elongated sensing fingers substantially alongside the mass fingers within the inner periphery of the mass for sensing movement of the mass fingers relative to the sensing fingers;

affixing the mass support structures to a substrate by at least one anchor positioned proximate to the mass' center of mass for supporting the mass above the substrate and allowing movement of the mass relative to the substrate; and

affixing the plurality of elongated sensing fingers to the substrate proximate to the at least one anchor such that mechanical stresses cause the mass fingers and the sensing fingers to move in substantially equal ways.

11. A method according to claim 10, wherein the mass support structures comprise:

a plurality of suspension springs; and

a plurality of support arms, wherein the suspension springs are disposed between the mass and the support arms, and wherein the support arms are affixed to the substrate.

12. A method according to claim 10, wherein affixing the mass support structures to the substrate comprises:

affixing the mass support structures to the substrate using a single anchor.

13. A method according to claim 12, wherein the single anchor is a substantially square anchor.

14. A method according to claim 10, wherein affixing the mass support structures to the substrate comprises:

affixing the mass support structures to the substrate using multiple anchors positioned substantially symmetrical about the mass' center of mass.

15. A method according to claim 11, wherein the support arms are formed substantially in one of:

a cruciform configuration; and

an "H" configuration.

16. A method according to claim 10, wherein affixing the plurality of elongated sensing fingers to the substrate comprises:

affixing at least one elongated sensing finger to the substrate using a single elongated anchor in order to reduce rotation of the elongated sensing finger about the anchor.

17. A method according to claim 10, wherein affixing the plurality of elongated sensing fingers to the substrate comprises:

affixing at least one elongated sensing finger to the substrate using multiple anchors in order to reduce rotation of the elongated sensing finger about the anchors.

18. A method according to claim 10, wherein the mass support structures support the mass within the mass' inner periphery toward the mass' outer periphery.

19. An accelerometer comprising:

a substrate;

a mass having an outer periphery, a cavity defining an inner periphery, and a plurality of elongated fingers along a portion of the inner periphery;

mass support structures, positioned within the inner periphery and affixed to the substrate by at least one anchor positioned proximate to the mass' center of mass, for supporting the mass above the substrate and allowing movement of the mass relative to the substrate; and

a plurality of elongated sensing fingers for sensing movement of the mass fingers relative to the sensing fingers, the sensing fingers positioned substantially alongside the mass fingers within the inner periphery and affixed to the mass support structures proximate to the at least one anchor such that mechanical

stresses cause the mass fingers and the sensing fingers to move in substantially equal ways.

20. An accelerometer according to claim 19, wherein the sensing fingers are electrically decoupled from the mass support structures.

21. An accelerometer according to claim 19, wherein the mass support structures comprise:

a plurality of suspension springs; and

a plurality of support arms, wherein the suspension springs are disposed between the mass and the support arms, and wherein the support arms are affixed to the substrate.

22. An accelerometer according to claim 19, wherein the mass support structures are affixed to the substrate using a single anchor.

23. An accelerometer according to claim 22, wherein the single anchor is a substantially square anchor.

24. An accelerometer according to claim 19, wherein the mass support structures are affixed to the substrate using multiple anchors positioned substantially symmetrical about the mass' center of mass.

25. An accelerometer according to claim 21, wherein the support arms are configured substantially in one of:

a cruciform configuration; and

an "H" configuration.

26. An accelerometer according to claim 19, wherein at least one elongated sensing finger is affixed to the substrate using a single elongated anchor in order to reduce rotation of the elongated sensing finger about the anchor.

27. An accelerometer according to claim 19, wherein at least one elongated sensing finger is affixed to the substrate using multiple anchors in order to reduce rotation of the elongated sensing finger about the anchors.

28. An accelerometer according to claim 19, wherein the mass support structures support the mass within the mass' inner periphery toward the mass' outer periphery.

29. An accelerometer comprising:

a frame having an outer periphery, a cavity defining an inner periphery, and a plurality of elongated sensing fingers along a portion of the inner periphery;

a mass, positioned within the inner periphery of the frame, having a plurality of elongated fingers positioned substantially alongside the sensing fingers; and

a plurality of suspension springs, positioned within the inner periphery of the frame, for coupling the mass to the frame and allowing movement of the mass relative to the frame.

30. An accelerometer according to claim 29, wherein the sensing fingers are electrically decoupled from the frame.

31. A micromachined apparatus comprising:

a substrate; and

at least one micromachined structure anchored to the substrate, wherein the at least one micromachined structure is subject to bending or twisting about

the anchor point, and wherein the at least one micromachined structure is anchored to the substrate using one of an elongated anchor and multiple anchors in order to reduce the bending or twisting of the at least one micromachined structure about the anchor point.

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32. A micromachined apparatus according to claim 31, wherein the micromachined apparatus is an accelerometer, and wherein the at least one micromachined structure comprises a fixed sensing finger.